

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-6. (Canceled)

7. (New) A vertical axis windmill comprising:

a support frame;

a vertical main shaft rotatably mounted to the support frame;

a support arm having a first end and a second end, the first end of the support arm being mounted to the vertical main shaft; and

a vertically elongated blade mounted to the second end of the support arm, the vertically elongated blade having an upper tilted end and a lower tilted end, each of the tilted ends gradually tapering and inclining inwardly towards the vertical main shaft at an angle of 30-45 degrees with respect to a vertical axis of the vertical main shaft,

wherein a chord length of the vertically elongated blade is 45-55 % of a radius of revolution of the blade.

8. (New) A vertical axis windmill according to claim 1, further comprising a plurality of the vertically elongated blades, each of the blades being mounted to its respective support arm, wherein the vertically elongated blades are arranged vertically in a plurality of levels, wherein the vertically elongated blades do not overlap vertically, and wherein the vertically elongated blades are spaced circumferentially at approximately equal angles from each other.

9. (New) A vertical axis windmill according to claim 8 wherein a bearing is positioned on the vertical main shaft at each of the plurality of levels.

10. (New) A vertical axis windmill according to claim 7 wherein a plurality of levels each comprising the vertically elongated blade and the support arm are vertically stacked to form

a shaft-installation section, and wherein a plurality of the shaft-installation sections are arranged in different angular directions.

11. (New) A vertical axis windmill according to claim 7 wherein a plurality of levels each comprising the vertically elongated blade and the support arm are vertically stacked, wherein a bearing is positioned between at least two of the plurality of levels, and wherein a power generator is provided in each of the plurality of levels to generate electricity.

12. (New) A vertical axis windmill according to claim 7, further comprising a steel tower for a high voltage power line, the vertical axis windmill being positioned in the steel tower.

13. (New) A vertical axis windmill according to claim 7, wherein a pair of the vertically elongated blades is mounted to the vertical main shaft, one blade of the pair of blades being closer to the main shaft and longer than the other blade of the pair.